



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APR 13/02  
#21

**In re patent application of:**

M. Bright, et. al.

**Serial No.** 09/303,368

**Group Art Unit:** 2167

**Filed:** April 30, 1999

**Examiner:** O'Connor, Gerald J.

**For: PRE-PROCESS FOR INBOUND SALES  
ORDER REQUESTS WITH LINK  
TO A THIRD PARTY AVAILABLE  
TO PROMISE SYSTEM**

Assistant Commissioner for Patents and Trademarks  
Washington D.C. 20231

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**REPLY BRIEF OF APPELLANTS  
UNDER 37 C.F.R. § 1.193 (b) (1)**

Sir:

Appellants have filed a timely Notice of Appeal from the final office action of the Examiner finally rejecting claims 1, 3-4,6, 8-9, 11, 13-24 in the above identified application. Appellants timely filed an Appeal Brief under 37 C.F.R. §1.192(c) on June 26, 2002. An Examiner's Answer was mailed September 24, 2002. The present Reply Brief is in response to issues raised in the Examiner's Answer.

Please charge any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 09-0457.

**FORMAL MATTERS**

Appellants substantially agree with the Examiner's comments in paragraphs 1-3 and 6-9. As to paragraph 4, no amendments after final rejection were ever disclosed as being submitted. As to paragraph 6, Appellants submit that the interpretation of the issues as expounded by both the Appellants and the Examiner are essentially the same. As to

paragraph 7, Appellants clearly indicated that the claims do stand or fall together and, as such, no further discussion was required. As to paragraph 5, Appellants further submit that the Summary of the Invention included a proper explanation of the invention; however the Summary of the Invention has now been resubmitted below to address the Examiner's concerns.

## **SUMMARY OF THE INVENTION**

In general, electronic sales orders (ESO) (e.g., a completed purchase order) are intercepted by the Order Interceptor of present invention and pre-processed prior to the submission of the resulting sales order to an order processing system (page 10, line 13-14). This pre-processing allows for an asynchronous availability check with any third party Available to Promise (ATP) packages, which may be running on a remote server (p. 8, lines 2-4). This asynchronous check with an ATP planning and forecast engine determines if material is available for a given quantity or delivery date; the result of which is to determine key information about the sales order, e.g., the sales organization or distribution channels involved in providing the material or items, prior to the actual processing of the order (p.5, line 21 to p.6, line 8). Based on the ATP result, the Order Interceptor is capable of modifying the ESO or even split the ESO into multiple requests. For example, if several line items are supplied by different delivery plants with different criteria, the ESO can be divided into multiple ESOs (p.6, lines 9-13; p.27, lines 4-7; p. 32, line 17 to p. 33, line10). This clearly provides efficiencies to the sales order system, compared to prior art systems.

In addition to supporting third party availability checks and splitting ESOs, the pre-processing Order Interceptor of the present invention provides a robust set of business rules that allows a supplier to configure how a sales order request is managed (p.6 lines 14-18). Business rules are pre-negotiated conditions that may provide substantial control over how sales orders are to be accepted and conformed. The use of these rules thus prevents subsequent problems in deliveries and keeps parties in conformance with agreements. This also provides efficiency to the ordering process.

The Order Interceptor of the present invention also provides for a Workbench component that allows any ESOs held for review to be viewed or edited. This is all performed prior to the processing of the order (p.8, line 12-16.)

To achieve these goals, the Order Interceptor 201 (as shown in Figure 2) includes a translator 202 for translating from any number of electronic data interchange (EDI) transmission 203 formats to a standard internal format (p. 10, lines 15-16). The Order Interceptor proceeds to examine the ESO by customer specific business rules contained in the business rules database 210. For example, depending upon the originating customer, the ESO can be configured for manual review, or for other customers, checks are made for minimum order quantities, still others for automating routing. If the Order Interceptor determines that an ATP check is needed, the Order Interceptor interfaces with a ATP system 204 (which may be a third party package on a remote server) to collect information from a data translator 205. The ATP serves as a planning and forecast engine that provides basic status such as material availability and delivery dates (p. 10, line 17 to p. 11, line 5). The ATP runs independently of the order processing system (p 8, lines 2-4).

If the Order Interceptor 201 determines that any of the business rules contained in the business rules database 210 fail, or there is any other processing problems to this point, the Order Interceptor interfaces with pseudo-sales order workbench 206, another feature of the present invention. This workbench function allows for manual review, modification, and/or corrections to the customer's order data within the internal format. The order processing systems may be systems such as IBM's OEMLS system 211 or the SAP AG Corporation order processing system 212 (p.12, lines 5-14). Thus, in essence, the Order Interceptor is more than a preprocessor for an order; it is a system which is capable of providing added value to the ordering processes by screening orders (and if necessary splitting orders), managing customers and providing pertinent information to an ordering processing system.

## RESPONSE TO EXAMINERS REPLY

Appellants respectfully submit that the Examiner appears to be misinterpreting the references in view of the ordinary interpretation. The present invention is meant for intercepting an already completed purchase order between two trading partners (page 1, lines 12-18) and then pre-processing the completed purchase order according to business rules before re-submitting the resulting order(s) to an appropriate order fulfillment system. Previous automatic systems that process purchase orders have flaws cured by the present invention such as, for example, non-integration with the order fulfillment embedded processing rules, or no automatic substitution of parts per business rules (page 2, lines 19 to page 3, line 7).

The references applied by the Examiner never disclose receiving a *completed* purchase order and then applying what is termed "pre-processing" by the present invention to that purchase order. In fact, both references teach away from this as presented below. In both references, the inventions are directed to the ultimate goal of generating a purchase order for the first time. The purchase order is the output of the references. In contrast, the purchase order is the input to the present invention. Nowhere is it ever disclosed or even remotely suggested in the references of receiving a completed purchase order and then pre-processing the purchase order (for example, by applying business rules or checking with a third party Available to Promise system) prior to actually posting the purchase order for fulfillment to an appropriate order processing system

### *Blinn Reference*

The Examiner argues that Blinn performs "pre-processing" of a purchase order, specifically, the Examiner directs the Appellants to Figures 13 and 15 (page 4 of the Examiner's Answer) for this proposition. Appellants strongly disagree with this proposition. Figures 13 and 15, and supporting text, are for building an initial order with human intervention and direction. The Examiner has stated that the "pre-processing system (346) for performing the pre-processing step" is from column 36, line 65, to column 37, line 28. Looking closely at the text Appellants note:

“Returning to state 1304, to a consumer may decide to initiate a sales transaction. To initiate a sales transaction, the consumer selects the check out button.” (column 36, lines 67 to column 37, line 1)

And also,

“Proceeding to state 1332, the order plan action 346 as discussed above with respect to FIG. 15, directs the order manager 322 *to create an order 124.*” (column 37, line 8-10) (emphasis added)

As can be seen, this section discloses a user deciding to *create* a (purchase) order at the end of the “pre-processing”. No purchase order exists until the end of Blinn. Therefore no “pre-processing” can occur on an already completed purchase order as is required by the present invention. In other words, since a sales order does not yet exist in Blinn during the “pre-processing”, no pre-processing on a purchase order can necessarily exist. The present invention receives as input what is being generated as output by Blinn. Blinn cannot “pre-process” what does not yet exist. Continuing even further according to the Examiner’s citation:

“Proceeding to state 1632, the components in the accept stage 390, generate a *completed purchase order.*”(emphasis added) (column 38, lines 5-6)

Here, again, is disclosed the end product of Blinn: a purchase order. It is the last stage of Figure 16, block 1632. Only at this point in Blinn does a purchase order exist. This point is the very end. All of Blinn’s disclosure deals with the steps leading to the creation of this purchase order entity; not any pre-processing of the purchase order itself. In contrast, a purchase order is the *input* to the present invention and which is the basis for the pre-processing step of the present invention.. Therefore, Blinn teaches away from the present invention and cannot obviously include the features of the present invention.

It is the context of the present invention completed ESOs (i.e., purchase orders, sales orders) are automatically intercepted by the present invention and then pre-processed according to business rules to validate the order according to business rules, etc., and then forwarding one or more resulting completed orders on to an order fulfillment system. No user intervention occurs unless a rule or exception requires this. However, in Blinn, human interaction is integral to the *creation* of a purchase order.

The present invention has been characterized as a “pre-processor” to an order fulfillment system, but performs functions different from the cited reference as explained above. The Examiner states, however, that:

“The only difference from the instant invention being that the “pre-processing” and “processing” performed by the system of Blinn, et al. is accomplished by two sub-systems, within the one overall system, rather than by two completely separate systems.”

As demonstrated above, the “pre-processing” of the present invention begins where the Blinn invention leaves off. Blinn does not “pre-process” an already completed purchase order and actual teaches away from this inventive step. Therefore the semantics of “pre-processing” and “processing” must be considered in context of what is occurring. The present invention is not building *initial* purchase orders with extensive user direction as does Blinn, but rather receiving already built purchase orders and then “pre-processing” these already built orders (according to rules for processing received complete purchase orders, etc) prior to routing to appropriate order fulfillment systems. Blinn does not do this.

The Examiner also states in reference to the Appellants’ Appeal Brief:

“Regarding the argument(s) that the instant invention “amounts to much more” than just splitting the processing of the system of Blinn et al. into separate pieces, any of which “much more” appellant, notably, fails to specify...”

When one realizes that the present invention is operating on an entity (e.g., a completed purchase order) it is readily apparent that Blinn cannot perform the features and functions of the present invention and hence the present invention does indeed “amounts to much

more than just splitting the processing of the system of Blinn et al. into separate pieces”. As stated previously, Blinn never receives and then operates on a completed purchase order according to business rules associated with complete purchase orders (or ESOs) and therefore necessarily cannot break the purchase orders into more multiple orders, cannot substitute parts in the order, cannot consult an ATP, etc.

Regarding the paragraph on page 10 of the Examiner’s Answer beginning with:

“Exemplary features which are argued by Appellant but not required by claim 1 include: processing ESOs; processing EPOs; validating criteria before routing the same, altered, or additional ESOs....”

Appellants submit that the essences of these items are captured in the claims. Appellants submit that the claims collectively do, indeed, require many of these features in whole or in part and Appellants have not argued that they are found exclusively in claim 1. For example, claims 1 and 16 require processing ESOs. In claims 3 and 22, “business criteria” is recited as “business rules”. In claim 3, “validating criteria” is recited as “in accordance with business rules” and claim 6 recites “ means for displaying electronic sales order data that contains errors or is incomplete”. In claim 1, “an ATP system interface” is recited as “an interface system receiving the ESO data from the order interceptor and performing an availability check”. Attentive close reading of the claims reveals substantial inclusion of these features in whole or in part in the claims collectively.

#### *Johnson Reference*

Appellants respectfully submit that the Examiner appears to be misinterpreting the Johnson reference in view of the ordinary interpretation. As stated above, the present invention is directed to automatically receiving a *completed* ESO (e.g. purchase order) and further validating and pre-processing the ESO under business rules without user intervention (unless rules call for intervention), etc. Whereas, Johnson is directed to generating a sales order for the first time. The Examiner points to column 13, lines 63 to

column 15, line 9 to support the concept of “pre-processing”. However the “pre-processing” that is being described in Johnson is the *building* of the sales order itself with the direction of a user (column 14, line 14 and line 21). This entire cited section is directed to searching and developing an initial sales order based on, for example, catalog search results. Again, as in the Blinn reference, a user intimately controls the process in order to create an initial sales order. The act of creating an original order is NOT the pre-processor of the present invention that the Examiner is trying to equate.

Further, the Examiner points to column 15, line 10 to column 15, line 59 as the “processing” step. Here, Appellants note again, as similarly in Blinn, that the *requisition is converted to a purchase order* (line 22). Again, and discussed in greater detail below, the requisition is not a purchase order. Also, all the “pre-processing” that has occurred to this point in Johnson has been to build a purchase order. There is no pre-processing of an already generated purchase order. As stated previously, a purchase order is the *input* to the present invention. Therefore, it is clear that the “pre-processing” of Johnson cannot logically be the same as the “pre-processing” of the present invention. An ESO (e.g., purchase order) is what the present invention receives and validates per rules as discussed previously and provides unique distinction by automatically processing purchase orders as described above. This is a succinct distinction of the present invention. Johnson, however, builds purchase orders, whereas, the present invention receives purchase orders and “pre-processes” them prior to transmitting to an order processing system. In other words, in the claims of the present invention, the ESO is an already existing entity that is received and “pre-processed”; however, in Johnson, the final product (as in Blinn) is an ESO. This is a major distinction between the Johnson reference and the claimed invention.

To further support the Examiner’s position, the Examiner states on page 14 that Johnson “explicitly discloses intercepting or receiving (44B) a ‘completed’ order (46) submission and checking (42B) for portions of the sales order (46) that can be satisfied.” Appellants disagree with the Examiner’s argument. Specifically, it is clearly described in the Johnson reference that 44B does not receive a completed sales order but rather a requisition item table 46. Element 44B in Figure 1A is an Inventory Sourcing program which is an attempt to determine what inventory will be used to fill the requisition of



table 46. Nowhere in Johnson does this element, 44B, receive a completed purchase order or sales order. Further element 46 is not a “completed” order but rather a Requisition item table as shown in Figure 1C. This requisition item table is a list of items that may or may not be included in an eventual purchase order.

Appellants submit that the Examiner appears to be assuming that a requisition is the same as a purchase order. They are not. Johnson confirms this distinction at column 10, line 61-64:

“In either of these two cases, a purchase order would be generated for an item, corresponding to a desired catalog item, that is identified by the same Fairmont catalog number that was requisitioned.” (emphasis added)

And again at column 15, lines 19-22:

“Once a requisition has been inventory sourced and accepted by the CSR, it can be converted to one or more purchase orders, as represented by step 114, in Fig. 3.” (emphasis added)

As can be further seen, a requisition is a different entity from a purchase order, which is clearly distinguished at column 3, lines 3-24. Specifically, column 3, lines 3-24 clearly disclose that the requisitioning is used to eventual create a purchase order; therefore, the requisition clearly then cannot be equated to a purchase order. Thus, the Examiner incorrectly equates a purchase order with requisition item 46, or, in general, a requisition.

Appellants further note that examination of Figure 3 shows that a purchase order 114 is generated as a final action, i.e., an output of the Johnson invention. However, a purchase order is the input to the present invention. Therefore the pre-processing of Johnson cannot be the same as the “pre-processing” of the present invention. In fact the pre-processing of Johnson would appear to be equated with the creation of the purchase order, not pre-processing of an already existing purchase order. Therefore it would not have been obvious to Johnson to receive a completed ESOs (e.g., purchase order), automatically apply business rules, automatically checking for availability, and then transmitting the ESOs on to an order processing system. Johnson is oblivious of

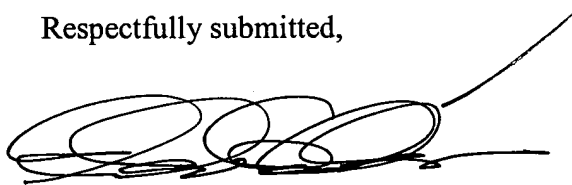
receiving completed purchase orders therefore cannot be expected to “pre-process” the purchase orders. Nowhere does Johnson teach an order interceptor receiving and pre-processing an ESO as in claim 1 of the present invention. Johnson never receives an ESO for “pre-processing”.

As with the Blinn argument, Appellants further submit that the essence of all the argued features is recited in the claims, overall. Appellants note, as argued with reference to Blinn that all of the argued features are not only present in claim 1, but throughout all of the claimed and recited invention.

### **Conclusion**

Appellants submit that the present invention is patentably distinct in view of the cited references. Neither reference discloses or suggests, alone or in combination, the features of the present invention. The present invention performs “pre-processing” on ESOs (e.g., purchase orders). In contrast, both references are generally related to creating a purchase order, from user direction, as its final output; whereas, a purchase order is an input of the current invention and used in the pre-processing step. As discussed above, this distinction is specifically confirmed by the references themselves. It is then submitted that the Examiner has failed to provide a *prima facie* case of obviousness, and that the entire application should be allowed to pass to issuance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Andrew M. Calderon', with a long horizontal line extending to the right.

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